

The object of this invention is to provide a solid polymer electrolyte which is excellent in durability and of low cost, and membranes, solutions for electrode catalyst coating, membrane/electrode assemblies and fuel cells which use the electrolyte. According to this invention, there can be provided a fuel cell which comprises an electrode assembly having an electrode catalyst membrane formed therein, said catalyst membrane comprising a polymer electrolyte membrane held between an anode on one side of the principal plane of the electrolyte membrane and a cathode on the other side of the principal lane thereof, current collecting plates provided each independently in close contact, to the anode side and the cathode side of the electrode assembly, and electroconductive separators having gas supply passages to the anode and to the cathode provided on the outside surfaces of the current collecting plates.